

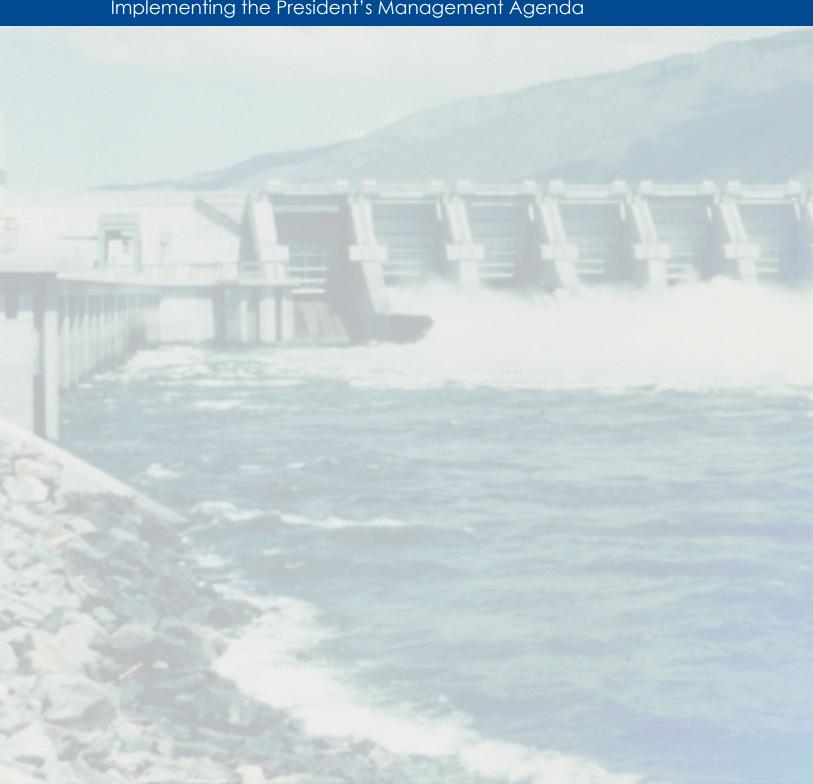
**U.S. Department of Energy** 

# Fueling Progress for America



Results from Implementing
the President's
Management Agenda
2005

Implementing the President's Management Agenda





# Message from the Secretary of Energy

On behalf of the Department of Energy's nearly 15,000 Federal and 100,000 contract employees nationwide, I am pleased to provide our customers,

the American taxpayer, this annual report on the status of our ongoing effort to transform the Department's management.

Energized by the President's Management Agenda, the Department has been recognized for leadership in management excellence since this significant reform initiative was launched in 2001. The Office of Management and Budget (OMB) noted the Department has "taken ownership of the President's Management Agenda to make lasting management improvements" and is working to "more responsibly account for the people's money and maximize the value of their human resources."

Our path of progress has been well documented by extensive internal reviews and quarterly scorecards issued to all agencies by OMB. At the beginning of the President's first term, the Department of Energy was among the lowest-rated agencies in terms of management across the Federal Government. As the President begins his second term, the Department is among the best in Government and, in OMB's words, is "leading the pack with regard to management improvement."

This report updates you on our progress in making the Department of Energy more efficient, more effective, more results-oriented, and more accountable to the citizens who pay taxes and benefit from our programs and services. The President's Management Agenda has fundamentally changed the way we conduct business. As demonstrated in this annual report, achieving success on each agenda initiative has enabled us to deliver significant returns on the taxpayer's investment.

Much hard work remains as we strive to meet the challenge of continuous improvement. Working together, we will achieve our goal of steadily improving every Department of Energy program and continue to transform the Department into an organization that makes good on its promises and delivers results for the Nation.

Samuel W. Bodman

Secretary of Energy

Samuel W Sodman

# **INTRODUCTION**



When President Bush issued his management agenda in 2001, the Department of Energy viewed it as an opportunity to make much-needed management reforms. Using the President's Management Agenda as the framework to guide our efforts, the Department went from an organization generally thought to be one of the Government's worst managed agencies, to one of the best in three years. For example, our improvements in cyber security are enabling the Department to better safeguard sensitive information about nuclear materials and weapons from terrorists and rogue states.

Secretary Bodman has committed to continue using the President's Management Agenda as the guidepost for our efforts to institute management reforms and transform the Department of Energy into the kind of results-oriented organization of which all Americans can be proud. He has designated his Deputy Secretary to spearhead efforts

to implement the President's Management Agenda initiatives to transform the Department into an organization that delivers results for the Nation.

# Strong Record of Achievement

When the President's Management Agenda was launched in 2001, the Office of Management and Budget (OMB) rated the Department "red" on all five Government-wide initiatives.
On the most recent scorecard, June 30, 2005, the Department received four "green" status ratings and one "yellow" status rating, reflecting the significant improvements we have made

This recognition resulted largely from publishing a comprehensive Asset Management Plan, which provides guidance on managing the Department's multi-billion dollar real property portfolio, and detailed plans for managing the real property at specific sites over the next ten years.

Factors

participates in the new Federal

Initiative and the Research and

Federal Real Property initiative

improved from red to yellow.

Real Property Asset Management

Development Investment Criteria

Initiative. As of June 30, 2005, the Department's status score on the

# Factors Contributing Toward Success

The Department's success in implementing the President's Management Agenda results from strong top level leadership, ownership by career officials, active communications, and participation across all levels of the agency, including the field.

"What matters in the end is completion.

Performance. Results.

Not just making promises,
but making good on promises."

President George W. Bush

in the strategic management of human capital, competitive sourcing, financial performance, e-government and budget and performance integration.

In addition to the five Governmentwide initiatives, the Department The Department's commitment to the President's Management Agenda begins with leadership from the Secretary and Deputy Secretary. Since the Agenda was announced in 2001, the Department's senior leadership has embraced its principles as a

#### Introduction

tool for making much-needed reforms and implementing a strategy to fulfill our management vision.

To ensure effective implementation of the Agenda, the Deputy Secretary chairs the Department's Management Council.

Comprised of the Department's top political and career officials, the Council meets monthly to discuss guidance from the President's Management Council, to review progress and challenges in implementing Agenda initiatives, and to establish clear expectations for future action.

The Deputy Secretary selected the Department's Associate Deputy Secretary to lead dayto-day implementation of the President's Management Agenda. Senior career executives were named to lead each of the seven initiatives. These career executives are responsible for developing and implementing long-term action plans to institute goaloriented management reforms for their initiative. In addition, a kitchen cabinet of career senior executives was established by the Associate Deputy Secretary to strengthen the commitment to the President's Management Agenda principles throughout the career ranks.

To enhance communication on the President's Management Agenda, the Secretary recently launched a website to provide more information on the Department's efforts and progress in implementing Agenda initiatives.

Finally, to ensure accountability, the Deputy Secretary issues a quarterly "report card" that uses stoplight scores to assess each component's performance in implementing the seven PMA initiatives. Components with yellow or red scores must prepare remediation plans, which are monitored by the Associate Deputy Secretary.

This integrated approach has fueled the Department's success in implementing the President's Management Agenda and instituting meaningful management reforms.

"I am proud to join the Department of Energy with its excellent record in implementing the President's Management Agenda. As we institute management reforms and transform the Department of Energy into the kind of results-oriented organization of which all Americans can be proud, we will use the President's Management Agenda as the guidepost for our efforts.

Secretary Samuel W. Bodman

# **DEPARTMENT of ENERGY**

**Meeting the Management Challenge** 



#### **Department of Energy Meeting the Management Challenge**

#### Meeting the Management Challenge

The Department is meeting the President's challenge by changing its approach to managing its people and its resources. When the first scorecard was issued in 2002. the Department was one of the Federal Government's lowestrated agencies. Three years later, OMB ranked the Department among the top cabinet agencies in implementing the President's Management Agenda. This annual report shares highlights of the Department's accomplishments and future plans for each President's Management Agenda initiative.

#### Innovation in Managing **Human Capital**

The Department developed and has begun implementing a comprehensive human capital plan that addresses the Department's organizational structure, work force size, skill gaps, performance management systems, and diversity. Implementation of the human capital plan has yielded significant results. For example, the Department has restructured three of its largest components to improve accountability, efficiency, and performance. Since 2001, the Department has reduced its work force by

"The Department of Energy's human capital management efforts have been developed to establish a strategic and comprehensive approach to improve human capital processes and programs. Our goals are to include workforce planning as an integral part of the Department's planning, provide managers with the approaches, authorities and tools necessary to ensure that they can successfully meet their mission challenges and to make DOE a great place to work."

> Claudia Cross Chief Human Capital Officer

has been measurably improved as demonstrated on scorecards issued by OMB.

Using the human capital plan as a guide, the Department has also begun a comprehensive analysis of its critical missionrelated skills and occupations. Preliminary results indicate that the most significant skills gaps

> are in the following areas: leadership and management, especially conflict management, strategic thinking and vision; project management; human capital management; information technology; and contract management. These findings will be used in developing programs for reducing skills gaps.

over 8 percent (from 14,688 to 13,476 employees); trimmed the number of senior executive service (SES) employees by 7 percent (from 432 to 400 executives); and reduced non-SES senior staff by 9.2 percent (from 4,585 to 4,162 employees). These reductions were made

To close skills gaps in two mission critical areas, project and contract management, the Department instituted rigorous certification programs for project and contract managers. Through these programs, the Department's project and contract managers must meet while management performance stringent technical, educational,

Department of Energy Meeting the Management Challenge

and experience standards to qualify for a project or contract management position. Ninety-six percent of contract managers have been certified. Fifty-two percent of incumbent project managers have been certified. The remaining project managers are on track to be certified by May 2006.

To re-tool its work force, the Department is also vigorously using Voluntary Separation Incentive Payment and Voluntary Early Retirement Incentive authorities. Fifty-nine percent of the Department's organizations are using these authorities to consolidate positions and phase out skill-sets that are no longer needed, providing the opportunity to recruit employees with skills critical to the Department's mission.

The Department's performance management and award systems have been strengthened by directly linking performance ratings with mission goals and holding employees accountable for results. To effectively distinguish between various levels of performance, the Department will eliminate the pass-fail performance systems that currently cover 38.5 percent of employees and implement a multi-level performance



management system

Department-wide beginning in fiscal year 2006.

The Department views the projected increase in retirements to be an opportunity for reshaping our work force into one with skills in such mission-critical areas as project and contract management. To prepare, the Department has determined the kinds of skills that will be needed to achieve our varied missions and has developed plans to recruit, retain, retrain, and/or outsource to build the required skill mix.

Examples of recruitment initiatives include a career intern program established to attract new talent into the National Nuclear Security Administration and the

SES candidate development program to identify future leaders. The Department is also using competitive sourcing to identify new skill sets to perform specific functions. The competitive sourcing study of the Department's financial services, along with the deployment of a new accounting system, identified the need for fewer highly-skilled technicians that allowed a reduction in staffing levels from 181 to 118.

To enhance the diversity of our work force, the Department launched the "Recruit America" campaign, which has targeted thousands of potential Hispanic employees and established a scholarship fund to provide internships to Hispanic students. Opportunities for women and

#### Department of Energy Meeting the Management Challenge

minorities have also increased. Since 2001, the number of women and minorities in senior executive positions has increased by more than two percent. In addition, the Department has worked closely with the Walter Reed Army Medical Center to support the Transition Assistance

Program for soldiers wounded primarily during their service in Afghanistan and Iraq. The Department will continue to develop and implement strategies for recruiting and retaining women, minorities, and persons with disabilities.

Innovation in Competitive Sourcing

The Department of
Energy is proud to be recognized
as a leader in the area of
competitive sourcing and was
one of the first agencies to earn
a "green" status score for its
Competitive Sourcing Program.
In the Competitive Sourcing
Results Report, published in 2004,
OMB identified the Department's
competitive sourcing program
as a model for other Federal
agencies.

The goal of the Department's competitive sourcing

program is to use the benefits of competition to improve efficiency, reduce costs to the taxpayer, improve service delivery, and enhance program performance. Since 2002, the Department has completed six competitive sourcing studies covering 543 positions that

competition to deliver financial services. This competition resulted in a consolidation of the Department's financial transaction processing units, which allowed a reduction of staff from 181 to 118 with \$31 million in savings over the next five years.

"The Department has created an infrastructure to ensure that competitive sourcing is a carefully and regularly considered management option for enhancing performance and reducing costs. Since 2002, DOE has completed six competitive sourcing studies that are expected to achieve \$82 million in savings over a five-year period."

Dennis O'Brien
Director
Office of Competitive Sourcing

are expected to save \$82 million over a five-year period. The studies pitted Federal employees in a head-to-head competition with the private sector in the following areas: graphics, financial services, civil rights review, National Nuclear Security Administration logistics, Headquarters logistics and human resources – training.

The Department's in-house teams have won four of these competitions, including a large

In September 2004, the Department announced two new studies involving 724 positions. The first study, which covers positions at the New Brunswick Laboratory, will be completed by the end of FY 2005. The study is expected to reduce the cost of operating this laboratory, which provides state-of-the-art nuclear

material measurement services to the Department's National Laboratories as well as scientists around the world. The second study, covering environmental engineering services positions, will be concluded in FY 2006 and is expected to reduce the cost while improving the efficiency of the Department's environmental management program.

In FY 2006, the Department will launch one or more competitions. The positions to

#### Department of Energy Meeting the Management Challenge

be studied will be identified following a review process that began in April 2005.

To ensure the winning bidders fulfill the commitments made in their proposals, the Department has established an Independent Verification and Validation process to certify that the winner of a competition is meeting the promised performance and cost targets. In December 2004, the first Independent Verification and Validation review was completed of the winner in the graphics study. Lessons learned from that review

have been used to further strengthen the competitive sourcing program. These include the need to better document improvements in efficiency, productivity, and costs as well as the need to better communicate with customers on operational improvements.

The Department has also taken steps to ensure that competitive sourcing is carefully and consistently considered as a management tool for enhancing performance and reducing costs. The Department's human

capital plans are used to help identify the functions for competition.

#### Innovation in Financial Performance

For six consecutive years, the Department has received a clean audit opinion on its financial statements with no material weaknesses. The Department has also improved the timeliness of its annual financial statements by reducing the timeline for issuance from 149 to just 46 days after the end of the fiscal year.

and a finance/accounting system, were successfully deployed in January and April 2005, respectively. Budget and procurement modules are being developed for deployment over the next two years. I-MANAGE will improve decision-making resources by providing managers with just-in-time data at their desktop. I-MANAGE is also expected to produce cost savings by integrating data systems, thereby reducing the need for duplicate data entry as well as reconciliation of data from multiple sources. Additional savings will result from eliminating redundant systems.

"The Financial Performance Initiative adds momentum to the Department's ongoing efforts to further improve the reliability and availability of integrated financial and performance information in support of sound operational decision-making."

Helen Sherman Director, Office of Finance and Accounting Policy

As part of the effort to consistently improve the availability and reliability of financial data, the Department launched an aggressive effort to build an integrated business management system – I-MANAGE. The initial components of this system, a data warehouse

Financial data provided by I-MANAGE will be used routinely by the Department to make better informed decisions about programs, worth hundreds of millions of dollars. For example, to reduce costs and improve efficiency, the Environmental

Management Program is establishing cost, schedule, and technical baselines for its entire cleanup program with life-cycle costs over \$100 billion. The National Nuclear Security Administration (NNSA) extracts obligation and cost data from the Department's Financial Data

#### Department of Energy Meeting the Management Challenge



Warehouse and summarizes the data each month for the agency's senior officials as a key management tool for program evaluation. Extracting obligation and cost data helps NNSA program managers better evaluate programs by presenting data in an easily understood and readily usable format and by providing trending data from both current and past years. This allows program managers to evaluate progress through the analysis of cost and schedule performance.

The Department has also developed an aggressive plan to improve the quality of financial data in specific areas, such as project management and information technology. For each area, the Department is

identifying the necessary outcomes (e.g., reduced costs and improved efficiency), by determining how financial data will be used to achieve the outcome, and by identifying how progress will be measured. For example, the Department has established a goal of improving the reliability of project management performance data and using that data to ensure that on average projects are managed within 90 percent of cost, schedule, and performance targets.

Using this financial information, the Department implemented a rigorous process for monitoring its multi-million dollar construction projects to ensure that they adhere to cost, schedule, and performance targets. Monthly

reports are prepared evaluating project performance. Projects found to be off target are put on remediation plans or terminated. Prior to establishing this process, managers did not systematically review whether a project was on target or if cost overruns were rampant. This data provides managers with an "early warning system" to correct problems before they become intractable. The Department is evaluating strategies for making additional improvements and will implement improvement initiatives over the next year.

#### **Innovation in E-Government**

Over the past year, the Department has re-focused its e-government efforts on more effectively managing its information technology investment portfolio, improving its cyber security program, maturing its enterprise architecture, and enhancing controls on personnel security and physical access systems. These efforts address concerns cited in a November 2004 report issued by the Department's Office of Inspector General identifying information technology as an ongoing management challenge.

To improve management of its information technology (IT) investment portfolio and ensure

#### Department of Energy Meeting the Management Challenge

that taxpayer dollars are used more effectively, the Department has established processes to ensure that IT investments are necessary, support the Department's mission, are managed on cost and schedule, and deliver the promised results. For example, beginning in 2004, all IT projects over \$5 million were subjected to a more rigorous review process requiring certification by the Department's Chief Information Officer (CIO)

and the sponsoring organization that the project is necessary, does not duplicate existing systems, and will yield the expected results. This process has proven effective in weeding out unnecessary or unfeasible projects. As of May 2005, the Department did not have any major IT investments on OMB's "Watch List," which includes IT investments across the Government that OMB has determined as not having a sufficient business case. In addition, the Department is in the process of revising a departmental directive to more clearly define information technology policies and requirements.

Once approved, the execution

of an IT project is reviewed quarterly by the IT Council to ensure that cost, schedule, and performance are within acceptable thresholds. To ensure the reliability of project performance data, the Department will implement earned value management systems for its major IT investments and ensure that their performance is within 90 percent of the baseline by the end of FY 2005.

"The e-gov initiative of the PMA has provided a roadmap for significant improvements in Department of Energy information technology management. We continue working on our enterprise architecture to improve our business processes and identify functions for consolidation. We have increased the security of our IT enterprise by certifying and accrediting more than 90% of our operating systems."

Rose Parkes
Chief Information Officer

IT projects are also reviewed quarterly by the Department's IT Council to ensure that they align with the Department's enterprise architecture, which is the "blueprint" for the Department's network of IT systems. In 2005, we will expand our review to identify duplicative systems, refocus

funding on mission priorities and drive business decisions.

This year the Department's enterprise architecture was successfully linked to the Federal Enterprise Architecture and achieved a Level 3 on the OMB Enterprise Architecture Maturity Model. In FY 2006, the enterprise architecture will be further integrated with the IT investment review process to avoid duplicative systems and

ensure alignment with mission goals. The Department will also begin to use enterprise architecture data to support our strategic planning process.

As part of the effort to reduce the number of systems, the Department began deployment of our new integrated business management system – I-MANAGE. As a result of the

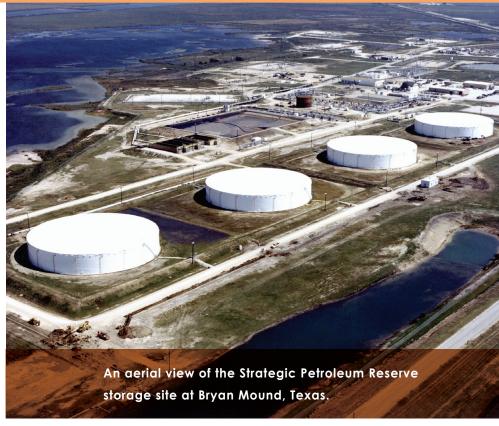
Department's success with I-MANAGE, OMB tapped the Department of Energy, along with the Department of Labor, to lead a Government-wide initiative to identify a crossagency financial management solution that improves performance and reduces

#### Department of Energy Meeting the Management Challenge

the 120 overlapping financial management systems now in operation.

Cyber security has become an increasingly important priority across the Government. To tackle the Department's cyber security challenges, the CIO established requirements for minimum security configurations and contingency planning. To help implement the requirements and coordinate activities, the CIO established a council of cyber security experts from across the Department. The CIO also convened its annual cyber security training conference to share policies, requirements, and strategies for reducing cyber security vulnerabilities. As a result of these and other measures, the Department has certified that over 90 percent of its IT systems have protections in place to guard against potential attacks.

In 2005, the Department will certify all IT systems for cyber security. Any system that cannot be certified will be shut down. The Department will also install and maintain security configurations on 100 percent of all critical IT infrastructure and key IT resources and at least 80 percent of all other systems by November 2005. We will also



continue to reduce cyber security vulnerabilities through aggressive scanning and monitoring across the Department's enterprise.

To support physical security improvements, by October 2005 the Department will use technology to implement "smartcards" for employee identification. This effort is part of the Department's implementation of Homeland Security Presidential Directive-12.

## Innovation in Budget and Performance Integration

The Department has made significant progress in integrating budget and performance.

Performance data from the Program Assessment Rating Tool (PART) reviews, the Department's 250 performance measures, and financial data are now being used to make better informed policy, program, resource, and operational decisions. Examples include:

Reducing funding for two Hanford Site clean up projects (K-Basin Facil ity Spent Nuclear Fuel Stabilization and Disposition and the Waste Treat ment Plant) due to delays in meeting project dead lines.

#### **Department of Energy Meeting the Management Challenge**

ing of plutonium materials ahead of schedule at three sites (Hanford, Rocky Flats, and Savan nah River). In addition to reducing the risk to the public, this allowed the funds to be redirected thus speeding up environmental cleanup and risk reduction elsewhere in the complex.

The Department is ahead of schedule in implementing the PART process, a management tool devised by OMB to assess and compare program effectiveness across agencies of the Federal Government. OMB has assessed 83 percent of the Department's programs, exceeding their target of 80 percent across the government. The remaining programs

(17 percent) have been assessed internally.

The Department has embraced PART as an internal self-assessment tool. Based on PART reviews, the Department has:

Reduced funding to begin

- an orderly termination of the Fossil Energy oil and gas programs in the FY 2006 budget, after they were determined to duplicate private sector research.
- Increased FY 2006 funding for the Nuclear Hydrogen program based on positive performance results as demonstrated by internal PART reviews in both FY 2004 and FY 2005.

computer simulation costs for the Department's annual nuclear weapons certification to the President by more than 30 percent (from \$8.30 million to \$5.70 million) Through the use of more powerful and efficient computer platforms.

In addition, the Department expanded its consolidated quarterly management report to include a summary of our overall efficiency measure results. The

Department will enhance program performance by comparing programs using the same relative metrics and forming a working group to explore strategies for developing crosscutting performance measures.

The Department instituted multi-year budget planning by submitting five-year budget plans

for three major program offices (National Nuclear Security Administration – Weapons Activities, Office of Environmental Management, and Office of Science) with the FY 2006 budget submission. Beginning with the FY 2007 budget

"Budget and Performance Integration provides the means for ensuring that the Department of Energy remains focused on achieving results. By periodically assessing our performance against improvement objectives and closely linking our funding and resource decisions to program results, we ensure that each program continuously improves its effectiveness and efficiency in support of the overarching goals of the Department."

David Robinson
Senior Policy and Management Advisor
Office of Management, Budget and Evaluation

Efficiency measures have been developed for each of the Department's programs and staff offices with the goal of streamlining program management and reducing costs. An example of the results of this effort includes reducing

#### Department of Energy Meeting the Management Challenge

request, the Department will submit integrated five-year plans for all programs and staff offices. In preparing the FY 2008-2012 budget submission, the Department will institute an enhanced planning process that informs the budget process. Benefits will include: greater discipline in budget decisions by considering them in a multiyear context and improving performance by increasing focus on the mission critical activities required to meet our strategic goals and objectives.

To make programs more accountable for results, the Department began applying the rigorous processes used for managing major construction projects to other program operations. Programs are required to conduct monthly self-assessments and report quarterly on their adherence to cost, schedule, and performance targets. This process enables senior managers to best allocate scarce resources among competing priorities.

The Department has developed a new tool for linking detailed performance and financial data. Tying costs to performance will result in more informed budget decisions by identifying the price for producing results. In FY 2006, the Department will complete its testing of this tool and begin linking actual performance and cost data. This is a significant step toward true budget and performance integration.

Finally, the Department's meaningful improvements in its financial and performance reporting speak for themselves. The Department's Performance and Accountability Report for fiscal year 2004 tied for 6<sup>th</sup> up from 12<sup>th</sup> in 2003 among Government agencies by the independent Mercatus Center in terms of transparency, public benefits, and leadership – using performance information to

"The Department has two resources to accomplish its many missions: its people and its infrastructure. DOE will continue to implement the management improvements needed to ensure the efficient and effective management of the Department's \$77 billion real property portfolio."

Jim Rispoli
Director
Office of Engineering and
Construction Management

identify solutions to perceived problems and to change future plans. The report also received the Association of Government Accountant's Certificate of Excellence in Accountability Reporting Award and we remediated the Department's performance measurement reportable condition that had existed since 1997. With the standards for excellence being raised each year, this recognition demonstrates our continuous improvements in performance measurement and performance reporting.

#### Innovation in Federal Real Property

The Department of Energy owns or controls a real estate portfolio worth \$70 billion. Taxpayers rightly expect the Department

to use sound business practices to manage this significant resource. To meet these expectations, the Department has issued an Asset Management Plan that provides guidelines and principles for managing the Department's real property portfolio. We have also completed plans for our 31 major sites outlining the

#### **Department of Energy Meeting the Management Challenge**

actions that we will take to ensure that the facilities are aligned with and capable of supporting mission requirements. For the first time, an accurate and current inventory of the Department's real property was developed and is being used to make property management decisions. Finally, the Department has developed a sampling methodology to assess the accuracy of the real property inventory. This process has been used successfully to assess the inventory data at three sites.

To further improve property management, the Department is developing performance measures to assess progress that are consistent with guidance from the Federal Real Property Council. The measures will gauge the condition,

operating costs,
utilization rates, and
mission dependency
of the Department's
real property portfolio
and help determine
the efficiency
and effectiveness
of the portfolio's
management.

The Department will also implement changes to its

corporate real property inventory systems to ensure consistency with Federal Real Property
Council guidelines, develop and begin implementing a timeline to meet the goals and objectives of the Asset Management Plan, and collect and report inventory information consistent with Federal Real Property Council guidelines.

## Innovation in Research and Development Investment Criteria

The costs and benefits of proposed research and development investments are being evaluated according to a new set of rigorous criteria. These criteria – Relevance, Quality, and Performance – are used not only when justifying projects and initiatives within the Department, but also in the

"The Department of Energy has played a leadership role in developing performance criteria for measuring the benefits of applied research and development programs. This approach allows decision makers to compare and contrast programs, make better budget decisions and will result in more effective use of taxpayers' dollars."

John R. Sullivan
Deputy Assistant Secretary for
Business Administration
Energy Efficiency and Renewable Energy

Program Assessment Rating Tool process and in budget proposals to OMB and the Congress.

The Department has demonstrated that more than 70 percent of its research and development programs are Moderately Effective or better as rated by the PART process. For the first time, energyrelated metrics were used by the applied research and development programs in the Department's Energy, Science, and Environment programs to inform budget priorities. The Department used data from these metrics to inform research and development budget decisions in developing the Department's FY 2006 budget proposal. The Department has developed and issued guidance for analyzing the Department's

research and development portfolio using standard methods and assumptions to estimate potential benefits of research and development programs. This guidance will be used to evaluate research and development investments proposed for the Department's FY 2007-2011 budget proposal.

#### **Department of Energy Meeting the Management Challenge**

### Other Management Challenges – Contract Management

Although contract management is not an initiative under the President's Management Agenda, it represents a significant management challenge for the Department of Energy. About three-fourths of the Department's budget is awarded to contractors each year. To ensure the Department receives expected deliverables and appropriately oversees contractor performance, the Department has implemented significant reforms. Examples include: increasing contract competition, especially for management and operating contracts, using more effective performance objectives and measures in contracts and instituting rigorous professional development requirements for contract management officials.

In a recent report, the
Government Accountability
Office (GAO) re-designated
the Department of Energy's
contract management
function as a high-risk area.
GAO acknowledged that the
Department has improved
contract management, but
found that the Department
needs to make further

improvements in managing and overseeing major projects. In another recent report, GAO recommended that the Department:

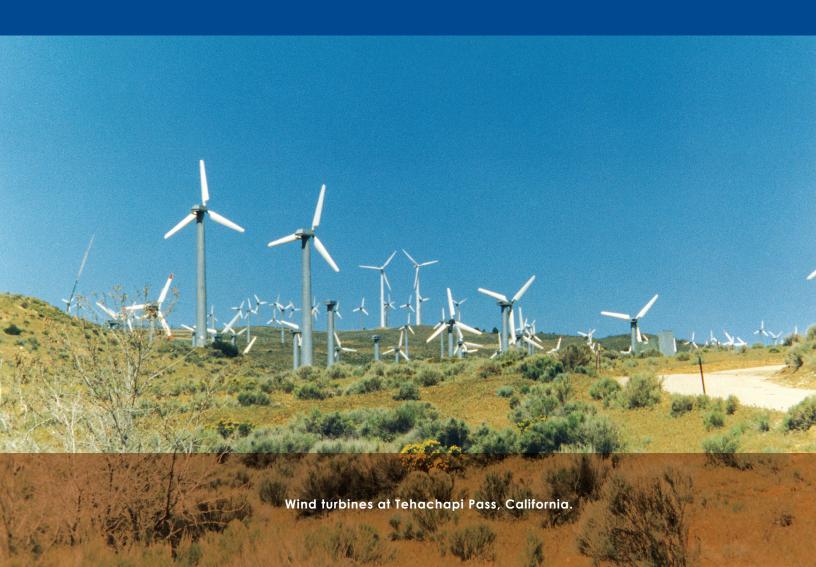
- Strengthen pre-contract award activities by developing a systematic approach to contracting and clarifying roles and responsibilities for reviewing contracts prior to award.
- Improve oversight of contract administration for major projects by conducting comprehensive self-assessments of contract administration, reducing the over reliance on contractor award data in awarding contract fees, and assessing the reliability of contractor project management systems.
- Enhance the performance of contracting officials and project directors by training contracting officials and project directors in Earned Value Management and providing project management training to program office officials.
- Improve the reliability and usefulness of project performance data by revising departmental guidance on reporting performance data, incorporating forward-looking

Deputy Secretary Clay Sell (left) is briefed at the Special Technologies Laboratory in Santa Barbara, California.

data into the Department's Project Assessment and Reporting System, updating data on a monthly basis, and improving the timeliness of performance data.

The Department is developing a comprehensive strategy for further improving its contract and project management functions. The strategy will address GAO's recommendations as well as other contact management issues identified by the Department.

# **DELIVERING RESULTS**



#### **Delivering Results**

#### **Delivering Results**

Over the past four years, the Department of Energy has successfully implemented mechanisms to help programs steadily improve their performance. Examples include systems to ensure that projects meet cost, schedule, and performance targets; five-year planning and budgeting to more strategically manage mid- to long-term program priorities; and contracting reforms to more systemically develop acquisition strategies and to more effectively manage contracts. In addition, the Department now uses performance and financial data routinely to make better informed business decisions and influence the annual budget process.

As a result of these and other management improvement initiatives, many departmental programs are demonstrating steady improvement in performance. Examples include the following:

#### Transuranic Waste Program

In our effort to eliminate the dangers from the legacy of cold war weapons production, the Department established the National Transuranic Waste Program. This program is designed to reduce the risk associated with radioactive waste defined as waste containing more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste with half-lives greater than 20 years. Through this program, transuranic waste currently stored at departmental sites is being shipped to the Waste Isolation Pilot Plant (WIPP) for disposal. WIPP is a repository located 2.150 feet below the surface in an ancient bedded salt formation located 26 miles east of Carlsbad, New Mexico.

When the disposal of waste at WIPP began in 1999, the Department made 33 shipments with 275 cubic meters of waste. As a result of increased efficiency and the application of project management principles, the program steadily increased the number of shipments and the amount of waste disposed. By 2002, 864 shipments were made carrying 5,134 cubic meters of waste. In 2004, 964 shipments were made with 8,810 cubic meters of waste. To date, more than 3,600 shipments have been made with over 29,000 cubic meters of waste disposed.

The efficient and effective

operation of WIPP is integral to departmental efforts to expeditiously clean-up and close sites. The Department's Rocky Flats site completed its last transuranic shipment to WIPP in April 2005, which was a significant milestone toward meeting their goal of closure in FY 2006. The Lawrence Livermore National Laboratory also made their last legacy transuranic waste shipment to WIPP in January 2005 except for their large box waste. Eight more sites with smaller quantities of transuranic waste have completed shipping their wastes to WIPP.

Earlier this year, the Department submitted a revised permit modification request to the New Mexico Environment Department to dispose of remote-handled transuranic waste. If granted, this will result in greater efficiency and significant cost savings.

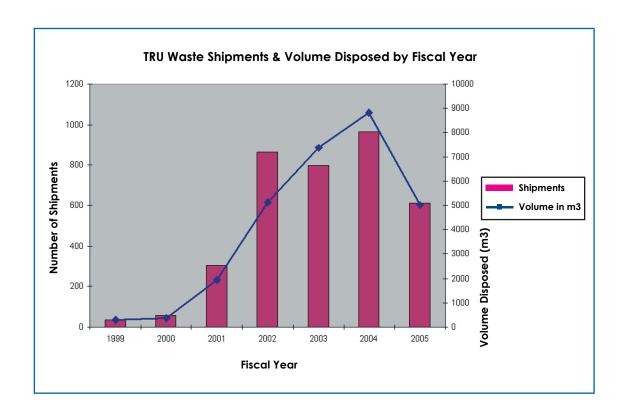
#### **Rocky Flats Closure Project**

The Department is proud of its accomplishments in cleaning up the Rocky Flats Closure site. With nearly 85 percent of the work completed, the project remains under cost and ahead of schedule. Based on information provided to Congress in 1995, the Department projected to

#### **Delivering Results**

close Rocky Flats in 2030 at a cost of \$36 billion. Instead, Rocky Flats is closing in 2006 at a cost of \$7.8 billion. Most environmental and health risks to the surrounding communities have been eliminated and the continue storing waste at the site. At best, future use of the site would have been limited to open space or light industrial use. Now, the site is completing cleanup and will be used as a wildlife refuge.

most efficient and effective means to accomplish the Department's goals for the site. Finally, support was obtained from the surrounding communities, Congress, and labor unions representing Rocky Flat's employees. The Rocky Flats



resulting cleanup will exceed all State and Federal requirements.

By the end of FY 2005, the project will be 98 percent complete.

This success exceeds original expectations. A decade ago, the Department planned to remove contaminated buildings by 2020, but expected to

The Rocky Flats success story is an excellent example of good project management and contracting improvements. The Department established clear goals for the site and then worked with State regulators to develop strategies for meeting the goals. Contract incentives were used to spur the contractor to find the

Project serves as model for the Department's remaining clean-up projects.

#### Idaho Cleanup Project

Test Area North at the Idaho National Laboratory is the site of several projects that were instrumental to the Nation's early nuclear energy program.

**Delivering Results** 



These include the development of nuclear-powered aircraft engines, analysis of spent nuclear fuel and core debris from the Three Mile Island reactor accident and design of test reactors.

The Idaho Cleanup Project is aggressively working to clean up Test Area North. To date, approximately 203,000 square feet of buildings and structures have been removed and work continues to demolish the rest of the contaminated facilities.

The 97-acre Subsurface
Disposal Area, also located
at the Idaho site, was used for
decades to dispose of low-level

and transuranic waste. The Department found that removing waste from the Subsurface Disposal Area is difficult due to the nature of the waste. To overcome this challenge, an innovative process, known as the Glovebox Excavator Method, was developed and successfully tested.

After years of careful planning, the Glovebox Excavator Method Project was successfully completed nearly eight months ahead of the required milestone date. Buried waste retrieval began on December 12, 2003. After 10 weeks of operations, the project was completed on

February 21, 2004. In total, 454 drums containing 78 cubic yards of waste were retrieved.

Innovations, which will be useful at other sites, included the use of a full-scale mockup project and waste probing technology that allowed workers to learn as much as possible about the buried waste. Identifying these issues earlier allowed the engineers to make appropriate construction design changes to ensure efficient operation of the facility. These adjustments enhanced productivity and were a key contributor to completing the project ahead of schedule. The changes also significantly enhanced work flow while protecting worker safety.

#### Oak Ridge Tank Remediation Project

Environmental management is the largest program at the Department's Oak Ridge, Tennessee site, with aggressive projects underway to clean up the legacies from more than 50 years of energy research and nuclear weapons production. As the Department becomes more experienced in project management and cleaning up waste, we have devised more sophisticated techniques that are resulting in

#### **Delivering Results**

great efficiency. The Department's performance in cleaning the last two inactive liquid low-level radioactive waste storage tanks is a case in point.

In March 2005, these tanks were filled with grout, completing a tank remediation project that began in early 2002. The two tanks contained a total of 3,300 gallons of low-level radioactive residue sludge. Removal of the sludge was originally scheduled for completion by June 2006 at an estimated cost over

\$10 million. Instead

more than one year

ahead of schedule

and at about half the

expected cost. This

it was completed

success resulted from modifying the existing management contract to an incentivized closure contract. These incentives motivated the contractor to identify the most efficient, effective, and safe means to complete the work.

#### Joint Genome Institute

Microbial genomics holds great promise for addressing the Department's most challenging mission needs. Beginning with microbial genomic DNA sequences determined by the Joint Genome Institute's Production Genomics Facility, the Department is working toward developing microbes that may someday generate hydrogen, make ethanol from biomass, sequester carbon dioxide, or clean up chemical or

"My commitment to ensuring the Department continues its outstanding record on implementing the President's Management Agenda is steadfast – not because we want to receive good scores, but because we must be well managed to achieve the President's energy priorities. Using the President's Management Agenda as our roadmap, we will transform the Department into an organization that makes good on its promises and delivers results for the Nation."

Deputy Secretary Clay Sell

radioactive waste. Determining the DNA sequences of these microbes is an important first step toward harnessing the potential of these tiny organisms for solving tough energy and environmental challenges.

As one of the leading DNA sequencing centers in the world, the Joint Genome Institute has sequenced scores of genomes, including more than

200 microbial genomes. These investigations are providing valuable information on the cellular machinery of microbes and their potential for such uses as cleaning up contaminated soil or water, capturing carbon from the atmosphere, and producing potentially important energy sources as hydrogen and

ethanol.

Since its creation in 1999, the Institute has steadily increased its sequencing rate from 20 million base pairs per year to a capacity now exceeding 2.5 billion bases each month (more than 30 billion per year). Accelerating the pace of the sequencing allows for more research and brings the Department closer to resolving some of our most daunting challenges.

## Material Protection Control and Accounting Program

This program has made dramatic progress in securing sites with weapons usable material and nuclear warheads. Security improvements at the 39 Russian Navy warhead sites containing hundreds of warheads are over 85 percent complete and 95

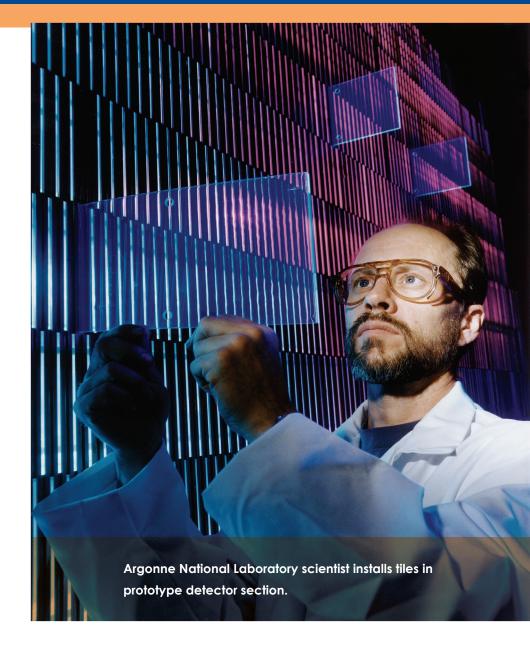
#### **Delivering Results**

percent will be complete by the end of FY 2005. Within the 51 sites containing weapons-useable nuclear materials, a total of 114 buildings have been upgraded. Security enhancements at these sites are over 75 percent complete and more than 80 percent will be complete by the end of FY 2005. Nearly half (46 percent) of all the nuclear materials within these sites have been secured.

The program has fine-tuned its management practices over the last four years. Program Management Guidelines, which describe the processes by which upgrades are performed based on the categorization of nuclear materials to be protected, have been developed. A streamlined contracting process allows for funds to be committed auickly to procure necessary equipment and arrange for installation. In addition, a password-protected website provides tools for project managers to track milestones, allocate resources and predict and if possible, avert schedule slippages. These innovations have contributed significantly to the program's steadily improved performance.

#### Impact on the Work Place

Department of Energy



employees are proud of the management and program improvements that have been realized over the last four years. These improvements have produced tremendous benefits for our Nation and its taxpayers, but they have also established an improved, more professional working environment for

employees.

#### Improved Project Management

One of the most significant management improvements the Department has made is to establish a structured, disciplined process to manage its multi-

#### **Delivering Results**

billion dollar project portfolio. This process ensures that projects support the Department's mission; fulfill a clearly articulated need; are properly planned; have sound costs-estimates, and are monitored for adherence to cost, schedule, and performance targets. It also ensures the involvement of the Department's senior officials in decision-making on major projects from start

The goal of improved project management is to ensure the Department meets its commitments to complete projects on schedule and cost and to ensure that taxpayers' dollars are spent wisely.

to finish.

Previously, in an effort to streamline processes, Federal oversight of project management was minimized, and the responsibility was deferred to contractors. Cost overruns on some highly visible projects caused the Department to reassess its processes for identifying, designing, managing, and constructing facilities and making critical improvements. To address the major challenges that remain, the Department is undertaking the specific actions described below to help achieve its goal of meeting cost, schedule, and performance targets for major projects.

For example, executives, program managers, and project directors are all now being held accountable for project performance. Beginning in FY 2004, their performance plans were amended to include explicit standards for meeting cost, schedule, and performance tar-

"The Federal Government is working to ensure taxpayer dollars buy more and go farther every year. I personally believe that we have done more in the past few years to change the way the Government works than during any comparable period in recent history."

Clay Johnson
Deputy Director for Management
Office of Management and Budget

gets for projects. To equip them with tools for success, the Department established a rigorous professional development program to provide project directors with the experience, training, and knowledge needed to competently manage complex projects. Beginning in May 2006, all major departmental projects must be led by a certified project director. To date, the Department has certified 70 project directors and expects to certify about 125 more over the next year.

To ensure the continuing availability of experienced project

managers, the Department is institutionalizing the certification program to establish a talent pool of prospective project managers. By providing such substantive opportunities for personal growth and development, the Department has begun to raise standards for professionalism and

foster an improved business environment.

The Department has also instituted programs to recognize project management teams that have performed in an exemplary manner. Since 2000, the Secretary has recognized 18 teams. Examples of recent award winners

include the Stanford Positron
Electron Asymmetric Ring 3
Upgrade Project at the Stanford
Linear Accelerator Center for
the successful completion of
the upgrade three months
ahead of schedule and within
the \$58 million budget and the
Comparative and Functional
Genomics Project Team at Oak
Ridge National Laboratory for
completing their project on time
with a cost savings of \$380,000.

The Department is also raising the standards used by our contractors to manage projects by enforcing the requirement

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that they use earned value management, which is a methodology that provides visibility into cost, schedule, and technical progress to assess project performance. The Department recently implemented a certification program for contractors' EVM systems to verify compliance with industry standards. To date, the Department has conducted three reviews. Five additional reviews will be completed in FY 2005, and 13 are planned in FY 2006. This effort, which is part of the President's Management Agenda Improved Financial Performance initiative, is compelling contractors to

examine their business processes and assume greater accountability for delivering results.

Implementing project
management improvements
has been challenging, but the
effort has proven worthwhile
as demonstrated by improved
performance. In 2002, only 49
percent of the Department's
major projects were operating
on cost and schedule. By
comparison, in June 2005, 90
percent met cost and schedule
targets. While significant
challenges remain and while
some projects are not performing
as well as expected, these

statistics reflect an increased commitment on the part of the Department's leadership, employees, and contractors to achieve high standards. They also demonstrate a heightened sense of professionalism and dedication to excellence at the Department of Energy.

Over the next several years, the Department will continue implementing reforms to improve project performance, including strategies to increase the reliability of the data by which performance is measured. The Department will also mount a vigorous effort to improve our contract management function, which has been on the Government Accountability Office's list of high-risk Government programs since 1990.

Using a series of strategies that target weaknesses in pre-contract award activities and oversight of contract administration, especially for major projects, the Department expects to improve contract performance. Similar to the network of reforms instituted for project management, the Department expects that this initiative will empower employees to manage our contracts in a more business-like and professional manner.

#### **Human Capital Reforms**

Through the President's
Management Agenda's Human
Capital initiative, the Department
has made tremendous strides
toward building a more highlyskilled work force in which
employees have greater
responsibility and are held to
higher standards.

Over the last two years, the Department has reorganized its three major organizations: the National Nuclear Security Administration, the Office of Environmental Management, and the Office of Science. As a result of these restructurings, the Department has reduced the number of senior executive service members and managers. These cutbacks have given employees greater opportunities to excel by allowing them to take on new challenges that may have previously been reserved for more senior staff.

To ensure that employees have the skills to assume greater responsibility, the Department instituted rigorous certification programs to close skill gaps in two mission critical areas: project management and contract management. The Department has also instituted

rigorous programs to identify and develop our future leaders.

For employees whose skill-sets may no longer be needed, the Department is offering separation or retirement incentives. Nearly 60 percent of the Department's organizations are currently using such incentives to consolidate positions and phase out outdated skill-sets, thereby providing the opportunity to recruit employees with skills critical to the Department's mission.

Along with more responsibility has come greater accountability. As a result, the Department's performance management and award systems have been strengthened by directly linking performance ratings with mission goals and holding employees accountable for results. To distinguish between various levels of performance, the Department is eliminating its pass-fail performance systems beginning in FY 2006.

These human capital initiatives have spurred a renewed sense of pride and purpose in the Department's work force. They have created an environment where employees have the opportunity to engage in more

challenging work for personal growth and development and for greater achievement. In short, they have made the Department a better place to work.

#### **Increased Emphasis on Safety**

People are the Department's most valuable resource. To ensure that the Department's employees and contractors, many of whom work in hazardous conditions where they are at risk for exposure to radiation and toxic chemicals, are safe in their workplace, the Department has recently heightened its attention to health and safety. Examples of initiatives include: The Department is instituting a comprehensive professional development program to enhance the skills and knowledge of managers and technical staff on health and safety requirements.

The Department is strengthening the requirements for the safety reviews that are required prior to the start-up or restart of nuclear facilities at departmental sites.

In addition, the Department is raising performance expectations with regard to health and safety. A recent example involves the safe use of

#### **Delivering Results**

lasers at Department facilities.
Following a laser accident, a report was issued that contained performance expectations to be implemented Departmentwide making improvements in laser safety programs. In addition to the Department of Energy, the performance expectations were adopted by the National Aeronautics and Space Administration as well as the Japanese Atomic Energy Research Institute.

In our ongoing commitment to keeping the environment safe for all, the Department has been aggressively improving our management systems for ensuring that the environmental consequences of our operations are identified early in the project planning process, and that appropriate preventive and mitigation measures are implemented in a timely manner.

The Department is in the process of establishing new complex-wide goals for pollution prevention at its sites to meet mission goals while reducing occupational exposure hazards associated with the use of toxic substances and to reduce the financial burden on taxpayers

from the generation and disposal of wastes.

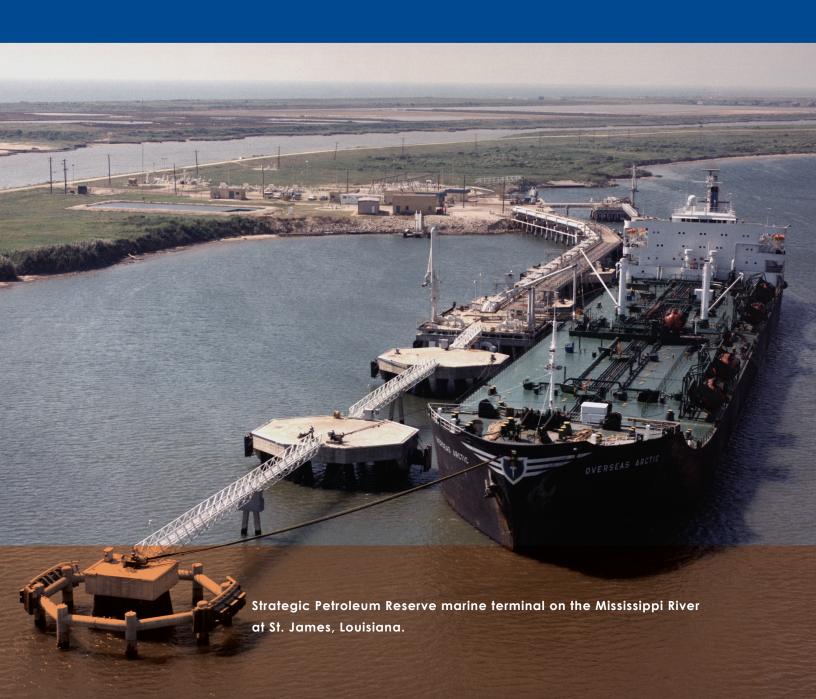
The health and safety of our employees has received increased attention. The Department expanded its Former Worker Medical Screening Program to cover all former Federal and contractor employees from all Department sites. This medical screening service contributes to improved health of former employees by promoting early detection and intervention for health conditions that could be related to their work at a Department site, and helps to determine whether existing safety policies are effectively protecting our work force. All interested former employees are eligible to receive a screening examination at a clinic located close to their home.

Another important part of our effort to promote a safer and better educated work force comes from the Office of Price-Anderson Enforcement. We carry out the statutory mandate to apply sanctions to Department contractors for unsafe conditions that violate nuclear safety and worker

safety rules designed to protect workers and the public. Our accountability system tracks the actions of the entire departmental complex, raising money through fining violators when necessary.

Increased attention to safety and health benefits every part of the Department. Our responsibility is to make sure our employees and the public are safe and secure, and that every year the Department becomes a more desirable place to work, a good neighbor, and a responsible steward of the taxpayers' funds.

# CONCLUSION



#### Conclusion

#### Conclusion

The President's Management
Agenda at the U.S. Department
of Energy has fundamentally
reformed the way we conduct
the people's business.
An increased sense of
professionalism and commitment
to mission excellence pervades
the Department's culture
as demonstrated by the
Department's improved scores
on the President's Management
Agenda initiatives over the past
four years.

The Department has made a steadfast commitment to building upon its successes by continuing to improve the way we manage human capital, use competitive sourcing as a strategic management tool, use financial data to make better-informed business decisions, harness the power of technology by better managing our information technology investments, use performance data to make sound budget decisions, better manage our Federal real property, and use research and development investment criteria to make more strategic investments.

Through implementation of the President's Management Agenda, the Department will strive to maintain continuous improvement of program performance and ensure that the Department's most valued resource -- its employees – are treated with the respect and professionalism that they deserve.

Armed with this commitment, we are confident that the U.S. Department of Energy will be able to meet the many challenges we face and will continue to face in the future.

"When it comes to our collective safety, we must never lapse into complacency.

Complacency is safety's enemy."

Samuel W. Bodman

Secretary of Energy



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